## Claims

10

20

25

30

1. An electric motor having a wound rotor and a stator,

the rotor having a rotor core mounted on a shaft, a commutator mounted on the shaft adjacent one end of the rotor core and rotor windings wound around the rotor core and connected to terminals of the commutator, and a fan for generating a flow of cooling air.

wherein the commutator has a base and a plurality of commutator segments fixed to the base, each segment having a brush contact portion and a terminal and the base having a support portion supporting the brush contact portion of the segments and a terminal portion supporting the terminals and wherein the fan has an integral inner collar from which a plurality of fan blades extend, the collar being fitted to the terminal portion.

- 15 2. The motor of claim 1, wherein the collar is fixed to the terminal portion by complementary formations including snap-fit detents.
  - 3. The motor of claim 2, wherein the complementary formations further include blade like projections extending radially from the terminal portion which engage slots in the collar to prevent circumferential movement of the collar about the terminal portion.
  - 4. The motor of claim 3, wherein the terminal portion has a plurality of housings accommodating the terminals and the snap-fit detents include at least one projection formed on each housing.
  - 5 The motor of claim 1, wherein the terminals of the commutator segments are insulation displacing type terminals and the terminal portion has a plurality of housings in which the terminals and lead wires of the rotor windings are received.
  - 6. The motor of claim 1, wherein the commutator is a cylindrical type commutator.
- The motor of claim 1, wherein the terminal portion and the support portion of
  the base are two separate parts.